

# CHAPTER-21(B)

## WATER SUPPLY & SANITARY WORK

समस्त मदों में जी.एस.टी. एवं 1 प्रतिशत लेबर सेस को छोड़कर अन्य सभी कर जैसे उपकर, लेवी फी, टोल व रायवट्टी आदि व ठेकेदार का लाभश व ओवर हेड आदि दरों में सम्मिलित हैं।

Sl. No.	Schedule Item No.	Description of the Work	P.W.D. Specification No.	Unit	Over All effective Rates Meerut/ Baghpat
1	2	3	4	5	6
21.01		Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings; including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.			
		a) 15 mm dia. nominal outer dia Pipes		RM	145.00
		b) 20 mm dia. nominal outer dia Pipes		RM	165.00
		c) 25 mm dia. nominal outer dia Pipes		RM	200.00
		d) 32 mm dia. nominal outer dia Pipes		RM	290.00
		e) 40 mm dia. nominal outer dia Pipes		RM	380.00
21.02		Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings, with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chases and making good the wall etc.			
	a	a) 15 mm dia. nominal outer dia Pipes		RM	260.00
	b	b) 20 mm dia. nominal outer dia Pipes		RM	300.00
	c	c) 25 mm dia. nominal outer dia Pipes		RM	350.00
	d	d) 32 mm dia. nominal outer dia Pipes		RM	440.00
21.03		Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer-in-Charge. External work..			
		a) 15 mm dia. nominal outer dia Pipes		RM	120.00
		b) 20 mm dia. nominal outer dia Pipes		RM	140.00
		c) 25 mm dia. nominal outer dia Pipes		RM	180.00
		d) 32 mm dia. nominal outer dia Pipes		RM	262.00
		e) 40 mm dia. nominal outer dia Pipes		RM	345.00



Sl. No.	Schedule Item No.	Description of the Work	P.W.D. Specification No.	Unit	Over All effective Rates Meerut/ Baghpat
		f) 50 mm dia. nominal outer dia Pipes		RM	525.00
		g) 62.50 mm dia. nominal outer dia Pipes		RM	1010.00
		h) 75 mm dia. nominal outer dia Pipes		RM	1240.00
		i) 100 mm dia. nominal outer dia Pipes		RM	1860.00
		j) 150 mm dia. nominal outer dia Pipes		RM	3820.00
21.04		Providing and fixing brass stop cock ISI marked approved quality as per direction of Engineer-in-charge.			
		a) 15 mm nominal bore		No.	205.00
		b) 20 mm nominal bore		No.	370.00
21.05		Providing and fixing brass stop bib cock ISI marked approved quality as per direction of Engineer-in-charge.			
		a) 15 mm nominal bore		No.	205.00
		b) 20 mm nominal bore		No.	295.00
21.06		Providing and fixing ball valve (brass) ISI marked approved quality complete,, High & low pressure with plastic floats complete as per direction of Engineer-in-charge.			
		High or low pressure with plastic floats:			
		a) 15 mm nominal bore		No.	280.00
		b) 20 mm nominal bore		No.	305.00
		c) 25 mm nominal bore		No.	490.00
21.07		Providing and fixing C.P. brass bib cock of approved quality confirming to IS:8931			
		a) 15 mm nominal bore		No.	525.00
21.08		Providing and fixing C.P. brass long nose bib cock of approved quality confirming to ISI standards and weighing not less than 810 gms.			
		a) 15mm nominal bore,		No.	595.00
21.09		Providing and fixing C.P. brass stop cock (concealed) of approved quality confirming to ISI standards IS 8931			
		a) 15mm nominal bore.		No.	585.00
21.10		Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality confirming to IS:8931			
		a) 15 mm nominal bore		each	485.00
21.11		Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI: 12701 marked (Sintex or equivalent) with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank complete as per direction of Engineer-in-charge.		per ltr.	6.25

Sl. No.	Schedule Item No.	Description of the Work	P.W.D. Specification No.	Unit	Over All effective Rates Maeruf Baghpat
21.12		Providing and fixing water-closet squatting pan (Indian type W.C. pan) with 100 mm Sand Cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:			
		White glazed earthen ware (Indian Type) Neycor W.C. Pan 580 mm Dia.		No	2950.00
21.13		Providing and fixing white vitreous china flat back or wall corner type tipped front urinal basin of 30x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required:			
		One urinal basin with 5 litre white P.V.C. automatic flushing cistern		No	4010.00
		Range of four urinal basins with 10 litre white P.V.C. automatic flushing cistern		No	11600.00
21.14		Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, G.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required:			
		Single half stall urinal with 5 litre PVC. automatic flushing cistern		No	5950.00
		Range of two half stall urinals with 5 litre PVC. automatic flushing cistern		No	8450.00
		Range of three half stall urinals with 10 litre PVC. automatic flushing cistern		No	10300.00
		Range of four half stall urinals with 10 litre PVC. automatic flushing cistern		No	14790.00
21.15		Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white P.V.C. automatic flushing cistern, with fittings, standard size G.I. / PVC flush pipe for back and front flush with standard spreader pipes with fittings, G.I. clamps and C.P. brass coupling complete, including painting of fittings and cutting and making good the walls and floors etc. wherever required:			
		Single squatting plate with 5 litre P.V.C. automatic flushing cistern		No	4975.00
		Range of two squatting plates with 5 litre P.V.C. automatic flushing cistern		No	7450.00
		Range of three squatting plates with 10 litre P.V.C. automatic flushing cistern		No	8690.00
		Range of four squatting plates with 10 litre P.V.C. automatic flushing cistern		No	11470.00



Sl. No.	Schedule Item No.	Description of the Work	P.W.D. Specification No.	Unit	Over All effective Rates Meerut/ Bagpat
21.16		Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:			
		White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C. P. brass pillar taps		No	3100.00
		White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap		No	2500.00
		White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps		No	2950.00
		White Vitreous China Flat back wash basin size 550x400 mm with single 15 mm C.P. brass pillar tap		No	2375.00
		White Vitreous China Angle back wash basin of size 600x480 mm with single 15 mm C.P. brass pillar tap		No	2410.00
		White Vitreous China Angle back wash basin of size 400x400 mm with single 15 mm C.P. brass pillar tap		No	2290.00
		White Vitreous China Flat back wash basin size 450x300 mm with single 15 mm C.P. brass pillar tap		No	2380.00
21.17		Providing and Fixing white vitreous china pedestal for wash basin completely at the back for the reception of pipes and fittings.		No	1010.00
21.18		Providing and fixing Stainless Steel A. ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required:			
		Kitchen sink with drain board			
		510x1040 mm bowl depth 250 mm		No	4450.00
		510x1040 mm bowl depth 225 mm		No	4220.00
		510x1040 mm bowl depth 200 mm		No	3930.00
		470x420 mm bowl depth 178 mm		No	3850.00
21.19		Providing and fixing water vitreous china water closer squalling pan (Indian type)			
		Long pattern W.C. pan of size 580 mm		No	1530.00
		Orissa pattern W.C. pan size 580x440 mm		No	1820.00
21.20		Providing and fixing water vitreous china pedestal type (European type/wash down type) water closer pan.		No	2110.00
21.21		Providing and fixing 8 mm dia C.P./ S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer-in-charge.		No	515.00
21.22		Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle/lever) conforming to IS 7231, with all fittings and fixtures complete.			
		10 litre capacity - white		No	1130.00
21.23		Providing and fixing controlled flush, low level cistern made of vitreous china with all fittings complete.			
		10 litre (full flush) capacity white		No	2460.00
21.24		Providing and fixing P.V.C. waste pipe for sink or wash basin including PVC waste fittings complete.			
		Semi rigid pipe			
		32 mm dia / 40 mm dia		No	105.00
21.25		Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.		No	975.00



Sl. No.	Schedule Item No.	Description of the Work	P.W.D. Specification No.	Unit	Over All effective Rates Meerut Baghat
21.26		Providing and fixing soil, waste and vent pipes: 100 mm dia			
		Sand cast iron S&S as per IS - 3989		Rm	800.00
		Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989		Rm	825.00
		Hubless centrifugally cast (wpun) iron pipes epoxy coated inside & outside IS 15905		Rm	800.00
21.27		75 mm dia meter			
		Sand cast iron S&S as per IS - 1729		Rm	800.00
		Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989		Rm	650.00
		Hubless centrifugally cast (wpun) iron pipes epoxy coated inside & outside IS 15905		Rm	750.00
21.28		Cutting chases in brick masonry walls for following diameter sand cast iron/ centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 12.5 mm nominal size), including necessary plaster and pointing in cement mortar 1:4 (1 cement : 4 coarse sand):			
		100 mm dia		Rm	320.00
		75 mm dia		Rm	240.00
		50 mm dia		Rm	145.00
21.29		Providing and fixing vitreous china dual purpose closet suitable for use as squatting pan or European type water closet (Anglo-Indian W.C. pan) with seat & lid fixed with C.P. brass hinges and rubber buffers, 10 litre low level flushing cistern with fitting and brackets, 40 mm flush bend, 20 mm over flow pipe, with specials of standard make and mosquito proof coupling of approved municipal design complete; including painting of fittings and brackets, cutting and making good the walls and floors wherever required.			
		White vitreous china dual purpose W.C. pan with white solid plastic seat and lid with white vitreous china flushing cistern and C.P. flush bend ISI Mark Kajaria equivalent Indian made Brand.		No	8500.00
21.30		Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting of flushing capacity 3 litre/6 litre (adjustable to 4 litre/ 8 litre), including seat cover and cistern fittings, nuts, bolts and gasket etc complete. ISI Mark Kajaria equivalent Indian made Brand.		No	10800.00
21.31		Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design.			
		100x100 mm size P type			
		with common burnt clay (non modular) bricks of class-150		No	2050.00
		150x100 mm size p type			
		with common burnt clay (non modular) bricks of class-150		No	2150.00

Sl. No.	Schedule Item No.	Description of the Work	P.W.D. Sepecification No.	Unit	Over All effective Rates Meerut/ Baghpat
21.32		Supplying and fixing C.I. cover without frame for manholes:			
		455x610 mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23kg		No	1050.00
		500 mm diameter C.I. cover (medium duty) the weight of the cover to be not less than 58 kg		No	2610.00
		560 mm diameter C.I. cover (heavy duty) the weight of the cover to be not less than 108 kg		No	4800.00
21.33		Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality			
		Square shape 450 mm internal dimensions		No	875.00
		Circular shape 450 mm internal diameter		No	875.00
		MD - 10			
		Square shape 450 mm internal dimension		No	1050.00
		Circular shape 500 mm internal diameter		No	875.00
21.34		Supplying and fixing C.I. cover 300x300 mm without frame for gully trap (standard pattern) the weight of cover to be not less than 4.5 kg		No	425.00
21.35		Providing and fixing toilet paper holder standrad size ISI marked C.P. brass as per direction Engineer-in-charge		No.	220.00

अधीक्षण अभियन्ता  
मेरठ वृत्त, लो.नि.वि., मेरठ

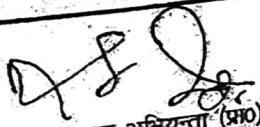
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मेरठ वृत्त, लो.नि.वि., मेरठ

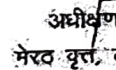


## CHAPTER -26 ANNUAL REPAIR

समस्त मदों में जी.एस.टी. एवं 1 प्रतिशत लेबर सेस को छोड़कर अन्य सभी कर जैसे उपकर, लेवी फी, टोल व रायव्हेटी आदि व ठेकेदार का लाभांश व ओवर हेड आदि दरों में सम्मिलित है।

S.I. No.	Description of work	PWD Spec. No.	Unit	Rate Meerut Baghpat
1	2	3	4	5
817	Painting letters upto 2.5 cm. size including supply of all materials, labour & tools and plants etc. required for proper completion of the work.	19.17.1	Each	5.00
818	As in item 817 above but size above 2.5 cm. but upto 8 cm.	19.17.2	Each	6.00
819	As in item no. 817 above 8 cm. but upto 15 cm.	19.17.3	Each	7.00
820	Repairing letters upto 2.50 cm. size including supply of all materials labour and tool and plants etc. required for proper completion of the work	19.17.4	Each	4.00
821	As in item NO. 820 above but size above 2.5 cm. but upto 8 cm.	19.17.6	Each	4.00
822	As in item NO. 820 above but size above 8 cm. but upto 15 cm.	19.17.6	Each	6.00
836 (a)	Painting Border line upto 2.5 cm. wide.		RM	7.00
(b)	Painting Border line upto 2.5 cm. to 5 cm. wide		RM	8.50
837 (a)	Re-Painting Border line upto 2.5 cm. wide		RM	6.00
(b)	Re-Painting Border line upto 2.5 cm. to 5 cm. wide.		RM	6.00
823	Repainting and relettering number plates on ends of parapets of culverts and bridges and boarder line in letters height from 2.5 cm. to 8 cm. with approved enamel paint of superior quality including supply of all materials, labour and T & P etc. required for proper completion of the work.		Each	70.00
832	Repainting and relettering of K.M. stones as per IRC design (except 5th km. Stone) with approved enamel paint of superior quality including supply of all materials, labour and T & P etc. required for proper completion of the work.		Each	160.00
833	As in item 832 above but 5th km. stone		Each	250.00
834	As in item 832 above but 200 H.M. stone.		Each	60.00
N.I. -1	Varnishing /Painting on chair /side rack with stand and such other items including all material labour T&P etc. complete for proper completion of the work.		Each	150.00
N.I. -2	Varnishing /Painting on Double bed including all material labour T&P etc. complete for proper completion of the work.		Each	550.00
N.I. -3	Varnishing /Painting on Singal bed/ Sofa/ Dining table including all material labour T&P etc. complete for proper completion of the work.		Each	350.00
N.I. -4	Cutting and repairing of walls or windows for fitting of window type A.C. including wooden bidding after fixing.		Each	425.00

  
 अकर अमियन्ता (प्रभो)  
 मेरठ कृत्, लो.नि.वि., मेरठ

  
 अधीक्षक अभियन्ता  
 मेरठ कृत्, लो.नि.वि., मेरठ

## CHAPTER -27

### SIGNAGE ITEMS

समस्त मदों में जी.एस.टी. एवं 1 प्रतिशत लेबर सेस को छोड़कर अन्य सभी कर जैसे उपकर, लेवी फी, टोल व रायवैल्टी आदि व ठेकेदार का लाभांश व ओवर हैड आदि दरों में सम्मिलित है।

Sl. No.	Schedule Item No.	Description of the work	P.W.D. Specification No.	Unit	Final
1	2	3	4	5	6
1	New Item	<b>Retro-Reflectorised Traffic Signs</b> <b>Direction and place Identification signs up to 0.90 sqm Size Board</b> Providing and erecting direction and place identification retro-reflectorised sign as per IRC-67 made of high intensity grade sheeting the retro-reflective sheeting type -IV shall be tested for 3 year outdoor weathering test in Indian conditions as per IRC 67-2012 & proof of the same in form of Government report shall be uploaded while quoting tender vide MOR&TH clause 801.3 fixed over aluminium sheeting 2mm thick with area exceeding 0.9 sqm supported on a mild steel single angle iron post 75x75x6 mm firmly fixed to the ground by means of property designed foundation with M-15 grade cement concrete 45x45x60 cm below ground level as per approved drawing complete. as per direction E-In- Charge Note : The Composite warranty jointly signed by original manufacturer & authorized converter of at least 7 years shall be furnished on non judicial stamp of required denomination both for retro reflective sheet and also complete signage.	801.00 MORTH	SQM	6300
2	New Item	<b>Direction and place Identification signs More than 0.90 sqm Size Board</b> Providing and erecting direction and place identification retro-reflectionised sign as per IRC-67 made of high intensity grade sheeting the retro-reflective sheeting type -IV shall be tested for 3 year outdoor weathering test in Indian conditions as per IRC 67-2012 & proof of the same in form of Government report shall be uploaded while quoting tender vide MOR&TH clause 801.3 fixed over aluminium sheeting 2mm thick with area exceeding 0.9 sqm supported on a mild steel single angle iron post 75x75x6 mm firmly fixed to the ground by means of property designed foundation with M-15 grade cement concrete 45x45x60 cm below ground level as per approved drawing complete. as per direction E-In- Charge Note : The Composite warranty jointly signed by original manufacturer & authorized converter of at least 7 years shall be furnished on non judicial stamp of required denomination both for retro reflective sheet and also complete signage.	801 MORTH	sqm	6990.00



Sl. No.	Schedule Item No.	Description of the work	P.W.D. Specification No.	Unit	Final
1	2	3	4	5	6
3		<p><b>Retro Reflective Signs (Type-IV Sheet) for single side</b>  Providing and fixing retro-reflective signboards comprising of customised modular PU Epoxy Coated MS angle iron frame work, aluminum composite panel (ACP) as base board, micro prismatic retro-reflective sheet and electro cut colored overlay film/latex printing. The horizontal and vertical members including inclined outer members of the MS frame module shall be made of pair MS angle iron. No panel size shall be more than one sqm and each panel shall be braced diagonally (one way only) with MS angle. The MS frame module shall have length not more than 3 mtr. The aluminum composite panel (ACP) shall have a thickness of 4mm with 0.5 mm thick skin of aluminum on both sides. The ACP shall be fixed on the MS frame with pop riveting or with self tapping SS screws 5mm dia spaced not more than 300mm centre to centre ensuring that no riveting is seen on either face of the frame. On the front visible face of the ACP, micro prismatic retro-reflective sheet conforming to Type-IV of ASTM: D 4956-09 shall be pressure fixed. The retro-reflective sheeting shall be tested for 3 year outdoor weathering test in Indian conditions as per IRC 67 2012 &amp; proof of the same in form of government report shall be uploaded with quoting tender. The rate include all materials, labour, equipments, fabrication, transportation, erection, installation and incidentals all complete as per direction of the Engineer-in-Charge. Signage on MS angle frame of (35x35x5)mm</p>	801 MORTH	SQM	4949.00
4		<p><b>Retro Reflective Signs (Type-IV Sheet) for both side</b>  Providing and fixing retro-reflective signboards comprising of customised modular PU Epoxy Coated MS angle iron frame work, aluminum composite panel (ACP) as base board, micro prismatic retro-reflective sheet and electro cut colored overlay film/latex printing. The horizontal and vertical members including inclined outer members of the MS frame module shall be made of pair MS angle iron. No panel size shall be more than one sqm and each panel shall be braced diagonally (one way only) with MS angle. The MS frame module shall have length not more than 3 mtr. The aluminum composite panel (ACP) shall have a thickness of 4mm with 0.5 mm thick skin of aluminum on both sides. The ACP shall be fixed on the MS frame with pop riveting or with self tapping SS screws 5mm dia spaced not more than 300mm centre to centre ensuring that no riveting is seen on either face of the frame. On the front visible face of the ACP, micro prismatic retro-reflective sheet conforming to Type-IV of ASTM: D 4956-09 shall be pressure fixed. The retro-reflective sheeting shall be tested for 3 year outdoor weathering test in Indian conditions as per IRC 67 2012 &amp; proof of the same in form of government report shall be uploaded with quoting tender. The rate include all materials, labour, equipments, fabrication, transportation, erection, installation and incidentals all complete as per direction of the Engineer-in-Charge. Signage on MS angle frame of (35x35x5)mm</p>	801 MORTH	SQM	6645.00



Sl. No.	Schedule Item No.	Description of the work	P.W.D. Specification No.	Unit	Final
1	2	3	4	5	6
5		<p><b>Retro Reflective Signs (Type-IV Sheet) for both side</b></p> <p>Providing and fixing retro-reflective signboards comprising of customised modular PU Epoxy Coated MS angle iron frame work, aluminum composite panel (ACP) as base board, micro prismatic retro-reflective sheet and electro cut colored overlay film/latex printing. The horizontal and vertical members including inclined outer members of the MS frame module shall be made of pair MS angle iron. No panel size shall be more than one sqm and each panel shall be braced diagonally (one way only) with MS angle. The MS frame module shall have length not more than 3 mtr. The aluminum composite panel (ACP) shall have a thickness of 4mm with 0.5 mm thick skin of aluminum on both sides. The ACP shall be fixed on the MS frame with pop riveting or with self tapping SS screws 5mm dia spaced not more than 300mm centre to centre ensuring that no riveting is seen on either face of the frame. On the front visible face of the ACP, micro prismatic retro-reflective sheet conforming to Type-IV of ASTM: D 4956-09 shall be pressure fixed. The retro-reflective sheeting shall be tested for 3 year outdoor weathering test in Indian conditions as per IRC 67:2012 &amp; proof of the same in form of government report shall be uploaded with quoting tender. The rate include all materials, labour, equipments, fabrication, transportation, erection, installation and incidentals all complete as per direction of the Engineer-in-Charge. Signage on MS angle frame of (35x35x5)mm</p>	801 MORTH	SQM	6633.00
6		<p><b>Retro-reflectorised Traffic sign as per IRC 67-2012</b></p> <p>Providing and fixing of retro-reflectorised cautionary, mandatory and informatory sign as per IRC 67:2012 made of high intensity grade sheeting vide clause 801.3, fixed over aluminum sheeting type-IV 1.5 mm thick supported on a mild steel angle iron post 75mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 cm x 45 cm x 60 cm below ground level as per approved drawing. The retro-reflective sheeting shall be tested for 3 year outdoor weathering test in Indian conditions as per IRC 67: 2012 &amp; proof of the same in form of government report shall be uploaded with quoting tender.</p> <p>a) 90 cm equilateral triangle with diffinitation plate size (20 cm x 60 cm)  b) 60 cm equilateral triangle with diffinitation plate size (20 cm x 60 cm)  c) 60 cm Circular with diffinitation plate (20 cm x 60 cm)  d) 80 mm x 60 mm rectangular with diffinitation plate (20 cm x 50 cm)  e) 60 mm x 60 mm rectangular with diffinitation plate (20 cm x 50 cm)  f) 60 cm x 60 cm square with diffinitation plate (20 cm x 60 cm)  g) 90 cm high octagon  h) 50 x 60 cm single chevron  i) 155 x 60 cm Double chevron  j) 30 x 90 cm (Left/Right) Object Hazard  k) 45 x 90 cm two way Object Hazard  l) 30 x 90 cm + 45 x 78 cm Guarded/unguarded Railway crossing</p>		No.	4065.00 3540.00 3815.00 4550.00 3765.00 4100.00 4820.00 3430.00 5670.00 3315.00 3820.00 4630.00
7	New Item	<p><b>Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface</b></p> <p>Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35-2015. The finished surface to be level, uniform and free from streaks and holes. Rates are inclusive of all taxes, royalty, etc. all T&amp;P/machine material and labour required for proper completion of work.</p>	803 MORTH	Sqm	615.00



Sl. No.	Schedule Item No.	Description of the work	P.W.D. Specification No.	Unit	Final
1	2	3	4	5	6
8	New Item	<p>Supply, fixing and hoisting of 6.00-7.00 m. span Cantilever Structure in position with one vertical post of 6.00 M. clear height from the top of R.C.C. foundation made of 300 mm. dia pipe welded with 10 mm thick MS plate at bottom supported with 10 mm thick MS plate stiffeners &amp; two nos. 8 mm thick MS plates at top welded with structure of 40 mm NB (M) pipe comprising of horizontal, vertical &amp; bracing pipe of 32 mm NB (M) as per structural design requirements &amp; approved drawing with vertical &amp; lateral clearance given in clause 802.2 &amp; 802.3 including one coat of primer and two coats of synthetic enamel paint on the whole structure &amp; installed as per clause 802.7 over a designed support system made up of concrete including excavation, lean concrete 1:4:8 cement, coarse sand and approved 20 mm grit and R.C.C. 1:2:4 with cement, coarse sand and approved 20 mm grit complete for fixing the complete structure in position as per direction of E/I charge. With 7 years warranty. Rates include design, fabrication, supply, transportation and erection of the signage structure inclusive of all taxes.</p> <p>royalty, etc. all T&amp;P/machine material and labour required for proper completion of the work.</p> <p>Note : The Composite warranty jointly signed by original manufacturer &amp; authorized converter of at least 7 years shall be furnished on non judicial stamp of required denomination for complete structure.</p>		Each	125000.00
9	New Item	<p>Supply, fixing and hoisting of 12.00 - 15.00 M span Overhead Structure in position with two vertical posts of 6.00 M. clear height from the top of R.C.C. foundation made of 300 mm. dia pipe welded with 10 mm thick MS plate at bottom supported with 10 mm thick MS plate stiffeners &amp; two nos. 10 mm thick MS plates at top welded with structure of 50 mm NB (M) pipe comprising of horizontal, vertical pipe of 40 mm NB (M) and bracing pipe of 32 mm NB (M) as per structural design requirements and approved drawing with vertical and lateral clearance given in clause 802.2 and 802.3 including one coat of primer and two coat of synthetic enamel paint on the whole structure and installed as per clause 802.7 over a designed support system made up of concrete including excavation, lean concrete with 1:4:8 cement, coarse sand and approved 20 mm grit and R.C.C. 1:2:4 with cement, coarse sand and approved 20 mm grit complete for fixing the complete structure in position as per direction of E/I, charge. With 7 years warranty. Rates include design, fabrication, supply, transportation and erection of the sign board and also inclusive of all taxes, pyalty, etc</p> <p>all T&amp;P/machine material and labour required for proper completion of the work.</p> <p>Note : The Composite warranty jointly signed by original manufacturer &amp; authorized converter of at least 7 years shall be furnished on non judicial stamp of required denomination for complete structure.</p>		Each	233000.00



Sl. No.	Schedule Item No.	Description of the work	P.W.D. Specification No.	Unit	Final
1	2	3	4	5	6
10	New Item	<p>Reflective Raised Pavement Marker Providing and fixing of raised pavement markers (Cat Eye) Type x-ASTMD-4956-04 Avery Dennison/3m(USA Make) having moulded body of polycarbonate, ASA, HIPS or ABS able to support a load of 13.635 M.T. tested in accordance with ASTM D 4280 type H and other requirement mentioned in MoRT&amp;H Circular, its reflective lens made of micro prismatic lens (capable of providing total internal reflection of light), electronically welded to the body. The length, height and width of the body shall not exceed 130 mm, 20 mm and 105 mm respectively. The area of each reflective surface shall not be less than 13 Sq. cm. on each side sloping at the angle of <math>35 \pm 5</math> degree to the base to ensure maximum reflectivity. It shall comply to specification of Category A of MoRT&amp;H circular no. RW/NH 33023/10/97-DO-III dated 11.06.97 lenses shall be moulded of methyl methacrylate conforming to ASTM D 788 or equivalent. With 7 years warranty. Rate shall be inclusive of all taxes, royalty, etc. All T&amp;P machine material and labour required for proper completion of work.</p> <p>Note : The Composite warranty jointly signed by original manufacturer &amp; authorized converter of at least 7 years shall be furnished on non judicial stamp of required denomination.</p>		Each	195.00
11	New Item	<p>Reflective Raised Pavement Marker with shanks Providing and fixing of raised pavement markers with twin shanks of adequate length anchored with epoxy / bitumen adhesive of approved make (Cat Eye) Type x-ASTMD-4956-04 Avery Dennison/3m(USA Make) having moulded body of polycarbonate, ASA, HIPS or ABS able to support a load of 13.635 M.T. tested in accordance with ASTM D 4280 type H and other requirement mentioned in MoRT&amp;H Circular, its reflective lens made of micro prismatic lens (capable of providing total internal reflection of light), electronically welded to the body. The length, height and width of the body shall not exceed 130 mm, 20 mm and 105 mm respectively. The area of each reflective surface shall not be less than 13 Sq. cm. on each side sloping at the angle of <math>35 \pm 5</math> degree to the base to ensure maximum reflectivity. It shall comply to specification of Category A of MoRT&amp;H circular no. RW/NH 33023/10/97-DO-III dated 11.06.97 lenses shall be moulded of methyl methacrylate conforming to ASTM D 788 or equivalent. With 7 years warranty. Rate shall be inclusive of all taxes, royalty, etc. All T&amp;P machine material and labour required for proper completion of work.</p> <p>Note : The Composite warranty jointly signed by original manufacturer &amp; authorized converter of at least 7 years shall be furnished on non judicial stamp of required denomination.</p>		Each	324.00
12	New Item	<p>Supplying &amp; fixing of Linear Delineator System (LDS) panels made of Micro prismatic Retro Reflective sheeting Type XI duly laminated on thin aluminium foil to a unique corrugated shape to provide retro reflection across wide range of observations and external angles. Each LDS panel should be of nominal length of 33 inch and each ridge shall be approximately 0.34 inch high. Each LDS panel is to be firmly fixed on existing Concrete / brick work with 16 Nos Fastener/ screw as per IRC 79-2019. Rates are inclusive of all taxes, royalty, etc. all T&amp;P machine material and labour required for proper completion of work.</p> <p>Note : The Composite warranty jointly signed by original manufacturer &amp; authorized converter of at least 7 years shall be furnished on non judicial stamp of required denomination.</p>		Nos	855.00
13	New Item	<p>Providing &amp; fixing of Bollard made (Single side) out of aluminium sheet 4mm thick welded poly shaped to make it monolithic pillar size 1200mm high Bollard is having a frame 900x600mm and 600mm dia for fixation made out of 35x35x5mm angle iron and from side is fully covered fixing the complete structure in position as per direction of E/I. charge. With 7 years warranty. Rates include design, fabrication, supply, transportation and erection of the sign board and also inclusive of all taxes, royalty, etc. all T&amp;P machine material and labour required for proper completion of work.</p>		Nos	5420.00



Sl. No.	Schedule Item No.	Description of the work	P.W.D. Specification No.	Unit	Final
1	2	3	4	5	6
14	New Item	Supply & fixing of Bollard. (Double side) Made out of aluminium sheet 4mm thick welded poly shaped to make it monolithic pillar size 1200mm high Bollard is having a frame 900x600mm and 600mm dia for fixation made out of 35x35x5mm angle iron and from side is fully covered. fixing the complete structure in position as per direction of E/I, charge. With 7 years warranty. Rates include design, fabrication, supply, transportation and erection of the sign board and also inclusive of all taxes, oyalty, etc all T&P/machine material and labour required for proper completion of work.		Nos	9480.00
15		Metal Beam Crash Barrier Type - A "W" : Metal Beam Crash Barrier Providing and erecting a "W" metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 70 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 1.8 m high, 1.1 m below ground/road level, all steel parts and filaments to be galvanised by hot dip process, all fittings to conform to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical post with a spacer of channel section 150 x 75 x 5 mm, 330 mm long complete as per clause 810 of MOR&TH		RM	3107.00
16		Metal Beam Crash Barrier Type - B "THRIE" : Metal Beam Crash Barrier Providing and erecting a "THRIE" metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 85 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 2.0 m high, 1.5 m below ground/road level, all steel parts and filaments to be galvanised by hot dip process, all fittings to conform to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical post with a spacer of channel section 150 x 75 x 5 mm, 330 mm long complete as per clause 810 of MOR&TH		RM	4214.00
17		TREE PLATE S/F Reflective tree plate having Size 15 Cm x 15 Cm, Consisting type XI sheeting over 1.5mm thick aluminium sheet including labour. Material T&P etc for proper completion of the work.		No.	100.00

अवर अभियन्ता (मो)  
मेरठ वृत्त, लो.नि.वि. मेरठ

अधीक्षक अभियन्ता  
मेरठ वृत्त, लो.नि.वि. मेरठ